

ABSTRACT

A method for energy storage and recovery for load hoisting equipment powered by an induction hoist motor controlled by a first inverter and having a dual inverter controlling a capacitor utilizing rest power such as reverse power generated from the motor when lowering a load, and unused power at small load or idle, to charge the capacitor whereby energy is stored in the capacitor and the system is reversed when a load is lifted and power is consumed whereby the capacitor is discharged to deliver power to the hoist motor.